US ERA ARCHIVE DOCUMENT

American Indian Drinking Water and Water Quality FY 2012 Performance

Drinking Water

An important priority for the National Water Program is to ensure that drinking water consumers in Indian Country receive public health and environmental protection through sustained PWS compliance with the National Primary Drinking Water Regulations (NPDWRs). EPA's Office of Water has three measures for tracking the safety of drinking water for tribes: percent of population in Indian Country receiving safe drinking water (SP-3), number of American Indian Alaska Native homes provided access to safe drinking water (SDW-18), and the number CWSs undergoing sanitary surveys (SDW-1b). EPA met one of the three commitments for these measures in FY 2012.

EPA failed to achieve its national target for the percentage of the population in Indian Country served by CWSs that receive drinking water meeting all applicable health-based standards. The performance of this measure has been impacted in various regions by the Total Coliform Rule, Stage 1 Disinfection By-Products Rule, and Nitrates Rule violations, as well as by data correction to address reporting problems. (SP-3) (Figure 92).

100.0% 87.0% 83.0% 87.2% 84.0% 90.0% 81.2% 81.2% 80.0% 87.0% 87.0% 82.2% 80.0% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% 2007 2009 2008 2010 2011 2012 2013 Result 87.0% 83.0% 81.2% 87.2% 81.2% 84.0% Commitment 87.0% 82.2% 87.0% 81.6% 80.0% 87.0% 87.0%

Figure 92: Population Served by CWSs in Indian Country by Fiscal Year (SDW-SP3.N.11)

FY 2011 Universe: 918,668 people

Eight of the nine regions with Safe Drinking Water Act direct implementation responsibility in Indian Country met or exceeded their individual commitments for this measure in 2012 (Figure 93). EPA is undertaking action to market potential resource availability for addressing infrastructure shortfalls by:

- Updating the Drinking Water Infrastructure Grants Tribal Set-Aside (DWIG-TSA) program guidelines to:
 - 1. Clarify the goal and priorities of the program to focus on compliance
 - 2. Changing the national funds allocation to ensure that funds are targeted to the Agency's strategic goals and priorities.
 - 3. Strengthening the project funding selection process to ensure that tribes have the technical, managerial, and financial capacity to operate the drinking water infrastructure funded by the program.
- Summarizing DWIG-TSA and PWSS program data in an annual report starting in FY 2014 to improve transparency and strategic coordination of the programs.
- Continuing communication with all partners via the tribal infrastructure task force (ITF) and biannual discussions with EPA regions that focus on clarifying collected data for use in communicating program achievements.

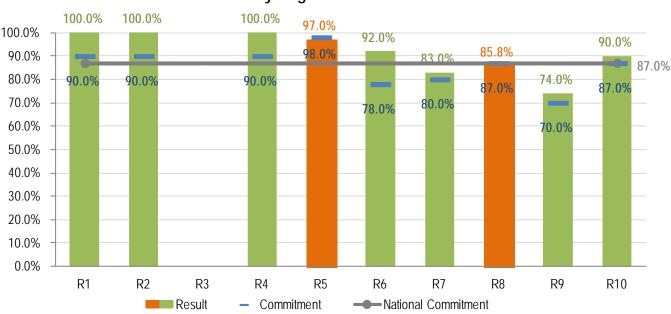
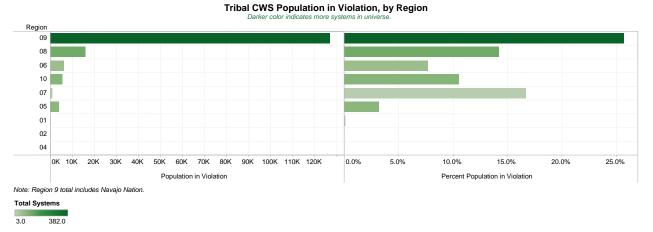


Figure 93: Population Served by CWSs in Indian Country (SDW-SP3.N11) by Region for FY 2012

Another perspective of tribal compliance is the tribal population in violation and the percent population in violation by region. In the figure below (Figure 94), the focus is on noncompliance (total population in violation) rather than compliance, and it shows the degree to which each region contributes to national noncompliance (and consequently, the result for measure SP-3). Region 9 (including Navajo Nation) and, to a lesser extent, Region 8 dominate the tribal population served by community water systems (CWSs) in violation. Region 7 tribes have a relatively high percent of population in violation (17%) but a small number of CWS (nine). The bar color indicates the number of CWSs.

Figure 94: Tribal CWS Population in Violation by Region

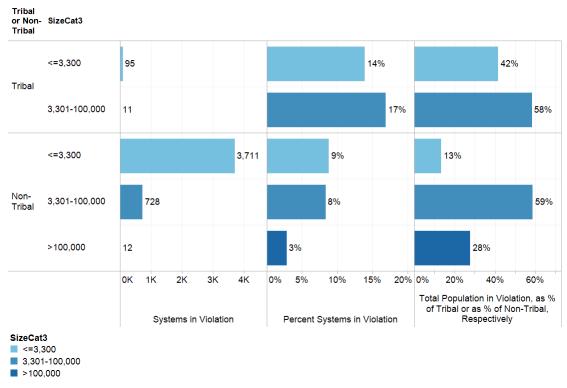


The size of tribal and non-tribal public water systems can have an impact on the percentage of populations receiving drinking water from systems that are in noncompliance. The vast majority of systems that are in violation for tribal and non-tribal populations are small systems. For tribal systems, a larger share of the medium systems are in violation (17%) compared to the small systems (14%). For non-tribal systems, a slightly larger percentage of the small systems (9%) are in violation compared to the medium non-tribal systems (8%). Fifty-eight percent of the tribal population affected by violations is served by medium systems which is more than the percent of tribal population in violation served by small systems (42%). And finally, 59% of the non-tribal population affected by violations is served by small systems which is significantly more than the percent of non-tribal population affected by violations that is served by small systems (13%). (Figure 95)

Figure 95:

Role of System Size in the Population Impact of Non-Compliance

Tribal Versus Non-Tribal Areas



This figure illustrates that there may be bang-for-the-buck opportunities in pursuing medium-sized systems, which account for a modest share of all systems (not shown) but a large share of the population in violation. Their role relative to that of small systems is more prominent than is often understood. This goes for both tribal and non-tribal systems. Another important fact is that small tribal systems have a higher noncompliance rate than small non-tribal systems (14% vs. 9%). This is revealing in the fact that it is often claimed that higher tribal noncompliance rates compared to non-tribal noncompliance is due to small systems. Further research is necessary to determine why small tribal systems perform worse than small non-tribal systems.

In the second year of reporting, EPA, in coordination with other federal agencies, fell just short of reaching its FY 2012 commitment of achieving 110,000 American Indian and Alaska Native homes with access to safe drinking water (SDW-18) (Figure 96). The result is due to a 20% drop in Indian Health Service and EPA tribal funding for water and wastewater infrastructure and an increase in the average unit cost to provide drinking water access to homes.

Although this program measure missed its commitment, EPA and its partners are making progress toward decreasing the number of homes that lack access to safe drinking water. At the end of FY 2012, the Indian Health Service reported that there were 30,275 tribal homes lacking access to safe drinking water in Indian Country, or 7.4% of the total number of homes in Indian Country. This represents the lowest percentage of homes lacking access to safe drinking water since EPA began tracking this program indicator in 2003.

140,000 120,000 104,266 97,311 119,000 100,000 80,000 60,000 40,000 20,000 0 2012 2011 2013 97,311 104,266 Result Commitment 100,700 110,000 119,000

Figure 96: Homes on Tribal Lands Lacking Access to Safe Drinking Water by Fiscal Year (SDW-18.N11)

Universe: 360,000 homes (2011)

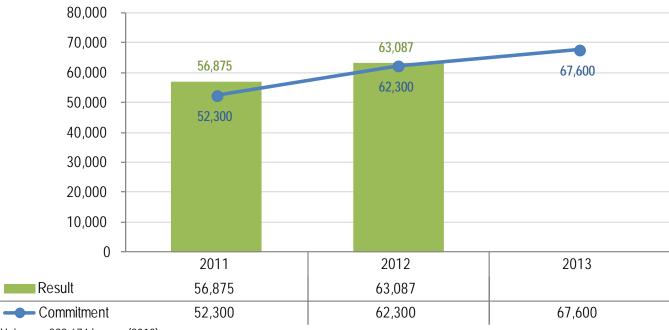
For the fifth year in a row, EPA has met its annual commitment for the percent of CWSs that have undergone a sanitary survey within the past three years, as required under the Interim Enhanced and Long-Term I Surface Water Treatment Rules. Eighty-two tribes underwent a sanitary survey in FY 2012, which was above the commitment of 76 tribes (SDW-1b). Note, however, that universe for this commitment measure over the past five years only represents 12.3% of the total systems and serves just 27% of the population. The universe for this measure is likely to increase significantly next year, however, as ground-water-based CWSs will be added to the number of systems that will potentially need to undergo sanitary surveys.

Water Quality

The National Water Program has six measures for tracking access to basic sanitation on American Indian lands and assessing the quality of tribal water quality programs. These include the number of American Indian and Alaska Native homes provided access to basic sanitation (WQ-24), the number of tribes with water quality standards (WQS) approved (WQ-2), the number of tribes submitting water quality criteria acceptable to EPA (WQ-3b), the number of tribes implementing monitoring strategies (WQ-6a), the number of tribes providing water quality data in an accessible format (WQ-6b), and the percent of current tribal NPDES permits (WQ-12b). The Office of Water met its commitments for all of these measures in FY 2012.

EPA, in coordination with other federal agencies, exceeded the FY 2012 commitment of providing access to basic sanitation to nearly 63,000 American Indian and Alaskan Native homes (Figure 97). In FY 2012, EPA continued to enhance the working tribal water infrastructure relationships with the Indian Health Service, USDA, and Department of Housing and Urban Development. EPA led the coordination of the ITF, composed of four federal agencies and tribal representatives addressing the severe infrastructure needs in Indian Country. Challenges remain, given that 12% of tribal homes are without water and/or wastewater service compared to 0.6% non-tribal homes.

Figure 97: Number of American Indian and Alaska Native Homes with Access to Basic Sanitation by Fiscal Year (WQ-24.N11)



Universe: 383,674 homes (2010)

EPA is committed to assisting any tribe interested in adopting WQS under the CWA (WQ-2). Meeting the eligibility criteria and developing the detailed standards can be a challenge for tribes and often requires them to spend some time and collaborate with EPA. Not all tribes can meet the criteria or want WQS authority. For this measure, therefore, the universe reflects all federally recognized tribes that have applied for "treatment in the same manner as a state" (TAS) to administer the WQS program (as of September 2009). In FY 2012, EPA met its annual goal by approving standards for 39 tribes (Figure 98).

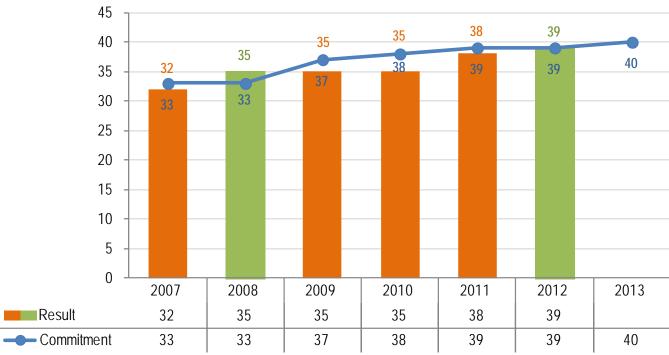


Figure 98: Tribes with Water Quality Standards Approved by Fiscal Year (WQ-02)

Universe: 62 tribes

Tribes continue to develop and implement their ambient water quality monitoring strategies. In FY 2012, 214 tribes that currently receive funding under CWA Section 106 developed and began implementing monitoring strategies. This was an increase of 18 tribes over the FY 2011 results and was slightly above the FY 2012 commitment of 213 tribes (WQ-6a) (Figure 99). Meeting this measure continues to be challenging as additional tribes apply for Section 106 grants and the amount of tribal set-aside funds remains the same.

One of the most important factors contributing to the success of tribal monitoring and assessment programs is improved tools for data submission. One hundred and eighty-four (184) tribes are providing water quality data in a format accessible for storing in EPA's data system. This is above the FY 2012 commitment of 178 tribes (WQ-6b). In FY 2012, EPA and tribes began reporting on a new indicator measure tracking water quality improvements at tribal monitoring stations. Fifteen stations demonstrated improvements in one or more of seven key water quality parameters.

250 214 196 222 200 213 161 176 150 134 101 128 100 44 79 50 37 0 2007 2008 2009 2010 2011 2012 2013 101 196 Result 44 134 161 214 Commitment 79 176 37 128 162 213 222

Figure 99: Tribes That Have Implemented Monitoring Strategies by Fiscal Year (WQ-06a)

Universe: 261 tribes

In the past, EPA struggled to meet annual commitments for keeping tribal NPDES permits current, but since 2010, EPA has met its commitments each year. In FY 2012, permits for 86% of tribal facilities were considered current, which was slightly above the national goal of 85% (WQ-12b) (Figure 100).

100.0% 85.0% 85.0% 88.1% 86.5% 86.1% 83.0% 90.0% 92.0% 80.0% 88.0% 86.0% 85.0% 84.0% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% 2007 2008 2009 2010 2011 2012 2013 Result 83.0% 85.0% 85.0% 88.1% 86.5% 86.1% Commitment 85.0% 92.0% 88.0% 86.0% 84.0% 85.0% 88.0%

Figure 100: Tribal NPDES Permits Considered Current by Fiscal Year (WQ-12b)

Universe: 412 tribal facilities

Overall, EPA regional offices maintained a strong performance and met the national commitment. While two regions did not meet FY 2012 commitments, one region missed its commitment by just two permits. In Region 7, a pending resolution between EPA and Kansas on methodologies and procedures for determining long-term bacterial limits delayed permit issuance in many cases. This issue has now been resolved and should not delay permit issuance in FY 2013. Various other permits were deactivated, had enforcement actions, or were delayed due to facility reconstruction. (Figure 101)

Figure 101: Tribal NPDES Permits Considered Current (WQ-12b) by Region for FY 2012

